Rev.E Mar.-2016

WR0<50P ṂṂĿ SQS ǽṀч s Ⅱ ⁊ Silicon PNP transistor in a TO-92LM Plastic Package.

љ 5VG99 : +D, Й ´
Complementary pair with 2SD667(A).

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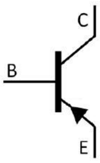
Low frequency power amplifier.

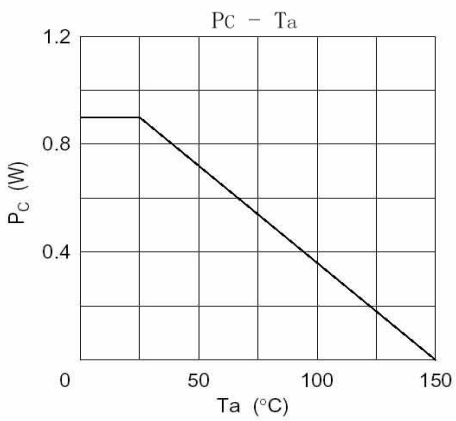


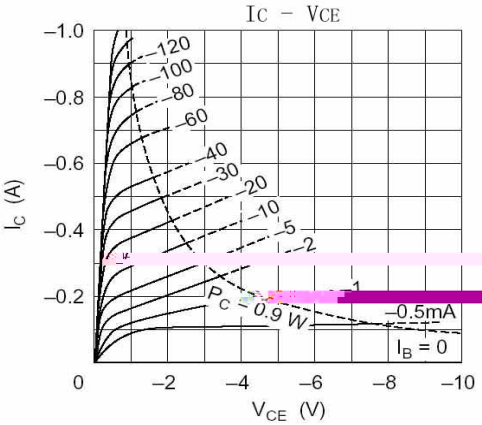
PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

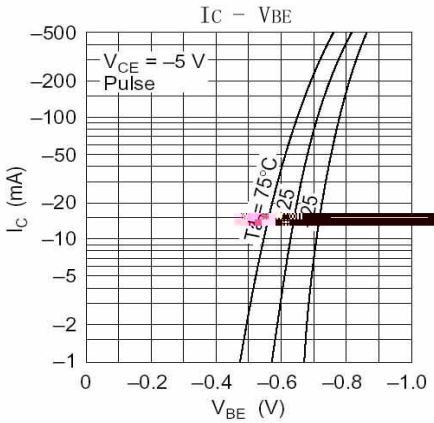
h_{FE} Classifications Symbol	B	C	D
h_{FE} Range	60 120	100 200	160 320

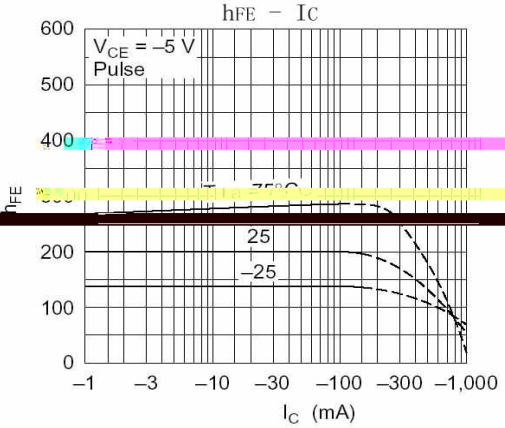
Parameter	Symbol		Rating	Unit
Collector to Base Voltage	V_{CBO}		-120	V
Collector to Emitter Voltage	V_{CEO}	2SB647	-80	V
		2SB647A	-100	
Emitter to Base Voltage	V_{EBO}		-5.0	V
Collector Current (DC)	I_C		-1.0	A
Collector Current(Pulse)	I_{CP}		-2.0	A
Collector Power Dissipation	P_C		900	mW
Junction Temperature	T_j		150	
Storage Temperature Range	T_{stg}		-55 150	

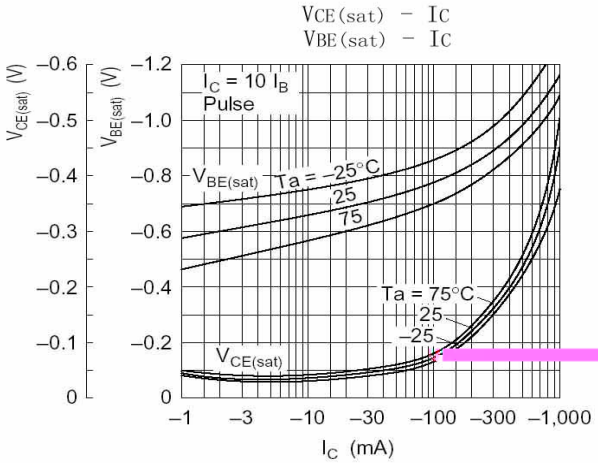
Parameter	Symbol		Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}		I_C=-10μA I_E=0	-120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	2SB647	I_C=-1.0mA R_{BE}=∞	-80			V
		2SB647A		-100			
Emitter to Base Breakdown Voltage	V_{EBO}		I_E=-10μA I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}		V_{CB}=-100V I_E=0			-10	μA
DC Current Gain	$h_{FE(1)}$		V_{CE}=-5.0V I_C=-150mA	60		320	
	$h_{FE(2)}$		V_{CE}=-5.0V I_C=-500mA	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$		I_C=-500mA I_B=-50mA			-1.0	V
Base to Emitter Voltage	V_{BE}		V_{CE}=-5.0V I_C=-150mA			-1.5	V
Transition Frequency	f_T		V_{CE}=-5.0V I_C=-150mA		140		MHz
Collector Output Capacitance	C_{ob}		V_{CB}=-10V I_E=0 f=1.0MHz		12		pF

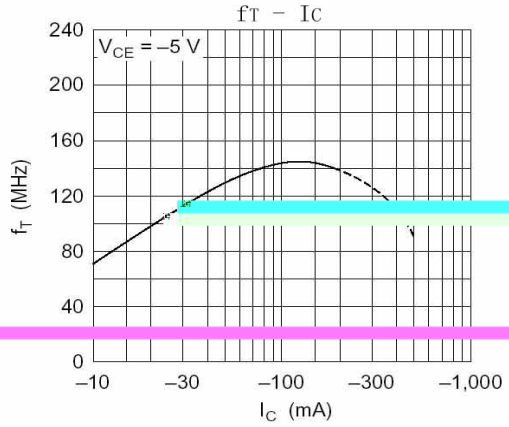

PC – Ta
PC (W)
Ta (°C)
1.2
0.8
0.4
0
50
100
150


IC – VCE
IC (A)
VCE (V)
–120
–100
–80
–60
–40
–30
–20
–10
–5
–2
–1
–0.5mA
IB = 0
PC = 0.9 W

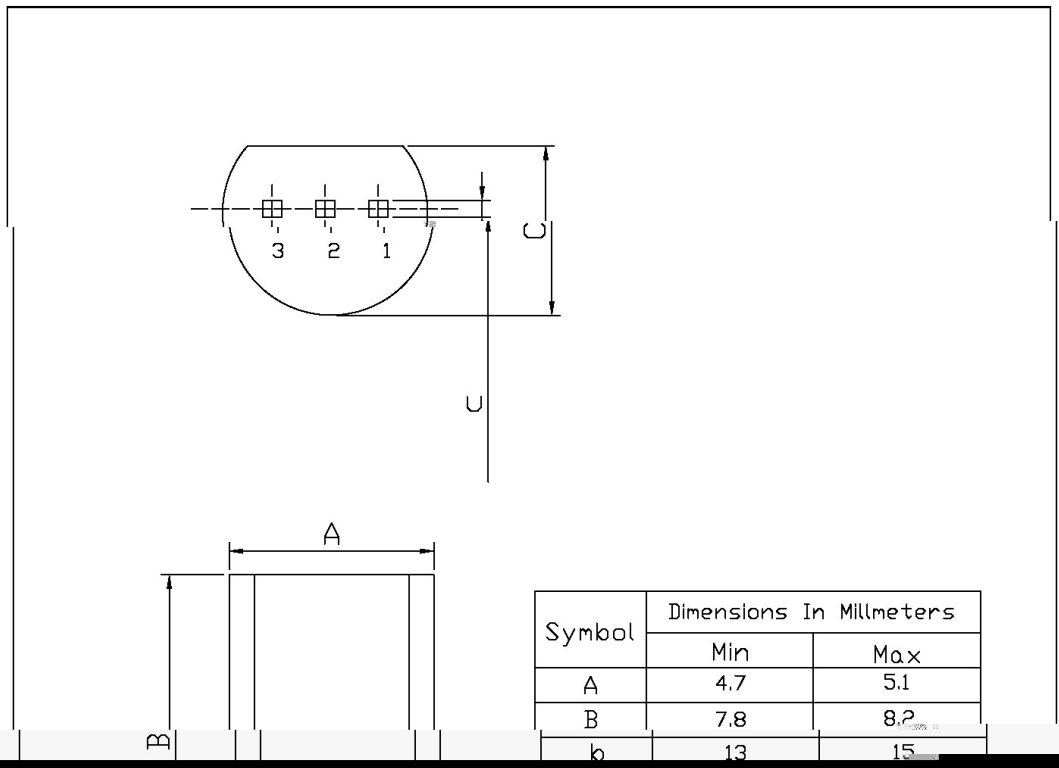

IC – VBE
VCE = –5 V
Pulse
Ta = 75°C
25
–25
IC (mA)
VBE (V)


hFE – IC
VCE = –5 V
Pulse
25
–25
hFE
IC (mA)

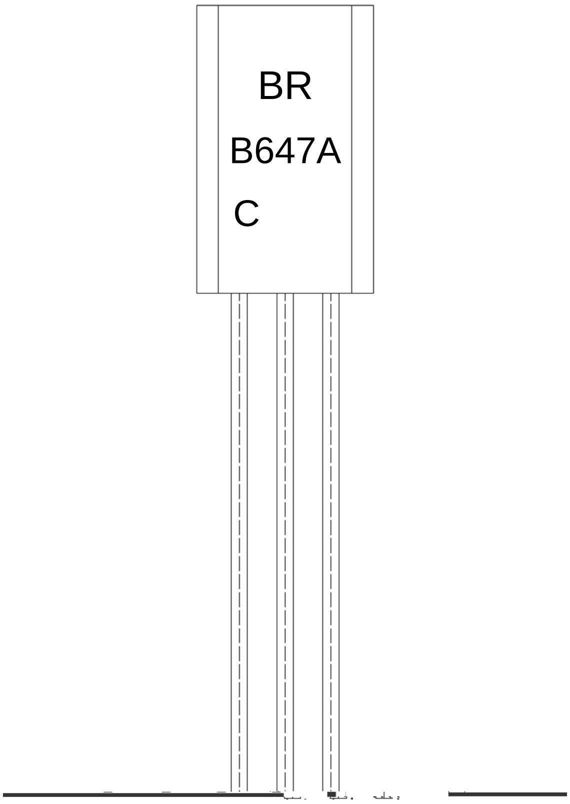

VCE(sat) – IC
VBE(sat) – IC
IC = 10 IB
Pulse
VBE(sat)
Ta = –25°C
25
75
Ta = 75°C
25
–25
VCE(sat)
VCE(sat) (V)
VBE(sat) (V)
IC (mA)


fT – IC
VCE = –5 V
fT (MHz)
IC (mA)

TO-92LM Unit: mm



Symbol	Dimensions In Millmeters	
	Min	Max
A	4.7	5.1
B	7.8	8.2
b	13	15



ب ˝ χ

EU: ꟷ ʅ ᴻ Ꮒ

E97 : D χ ꟷ ʒ ᴺ Ꮒ

F: ꟷ k ɪʜ ˂ ⁶ Ꮒ

---- χ ꟷ ɫ ғ ή ᴺ Ꮒ ɩ ɐ ɫ ғ ή ᴺ ᴪ ק

Note:

BR: Company Code.

B647A: Product Type.

C: h_{FE} Classifications Symbol

****: Lot No. Code,code change with Lot No.

ب ˝ χ

1 Ĺ ♬ □ ỷ 25 Ḱ 150 ł ı `H ڑ 60 Ḱ 90sec;

Note:

1.Preheating:25~150 ł